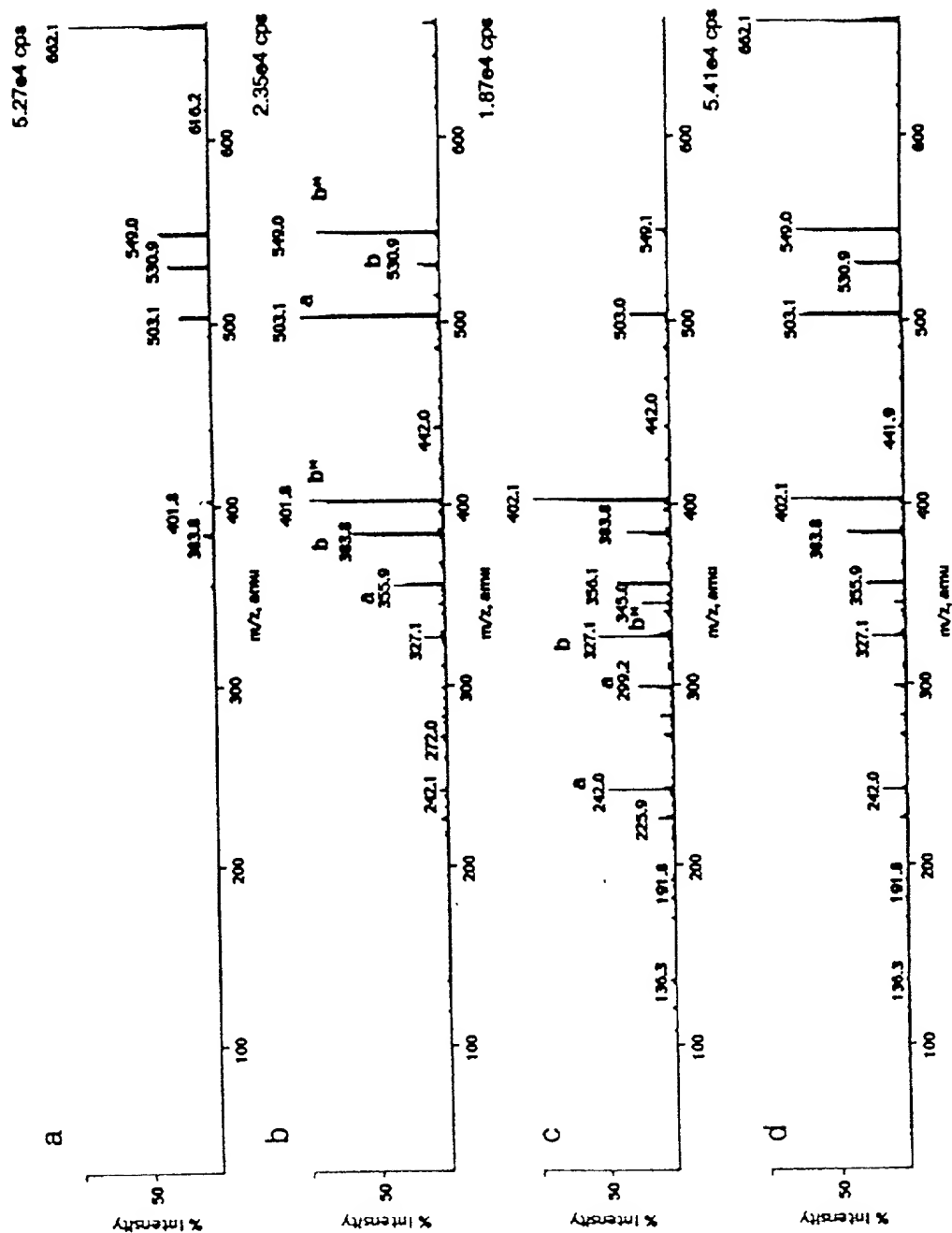


FIGURE 1



% intensity

FIGURE 2

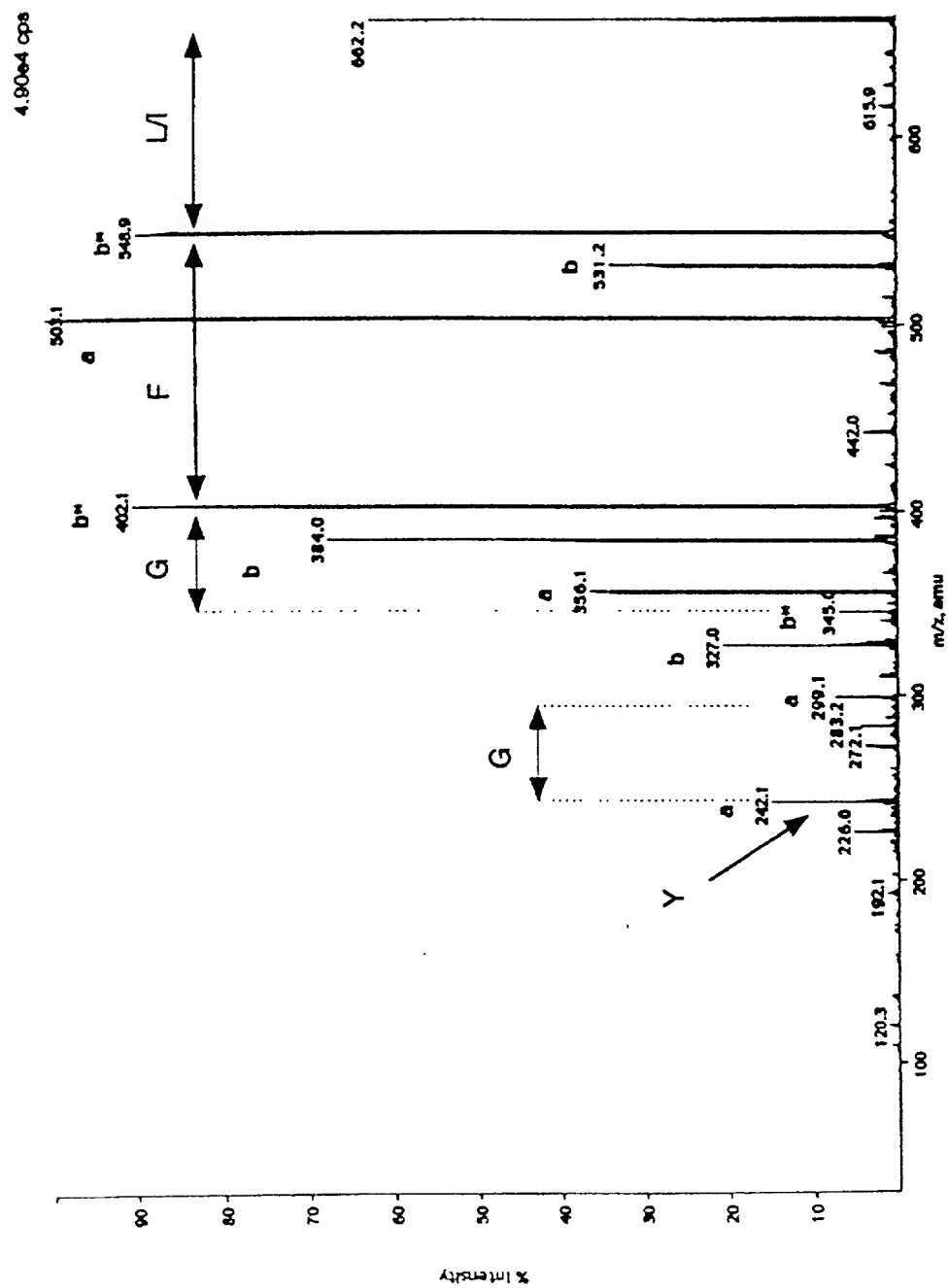


FIGURE 3

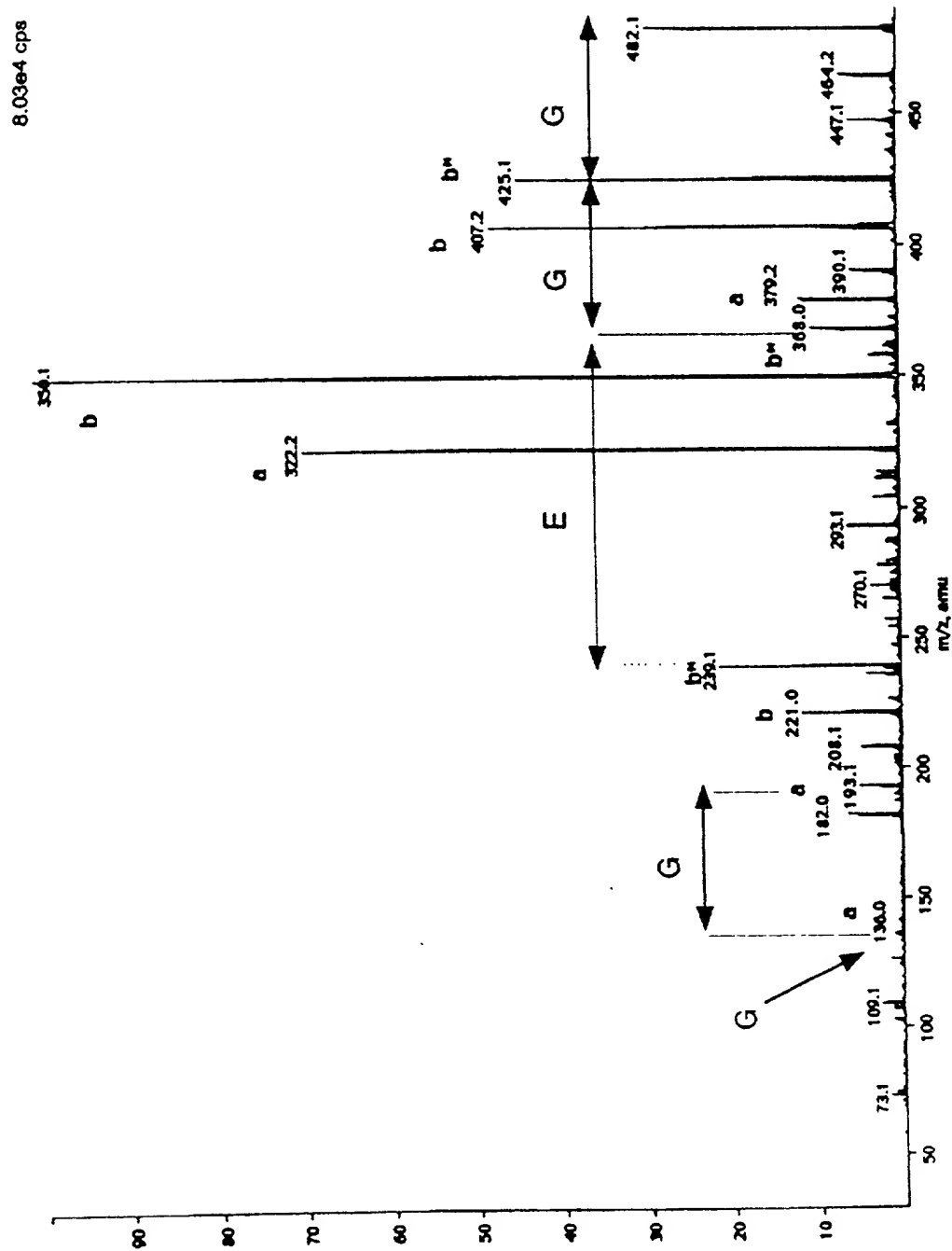


FIGURE 4

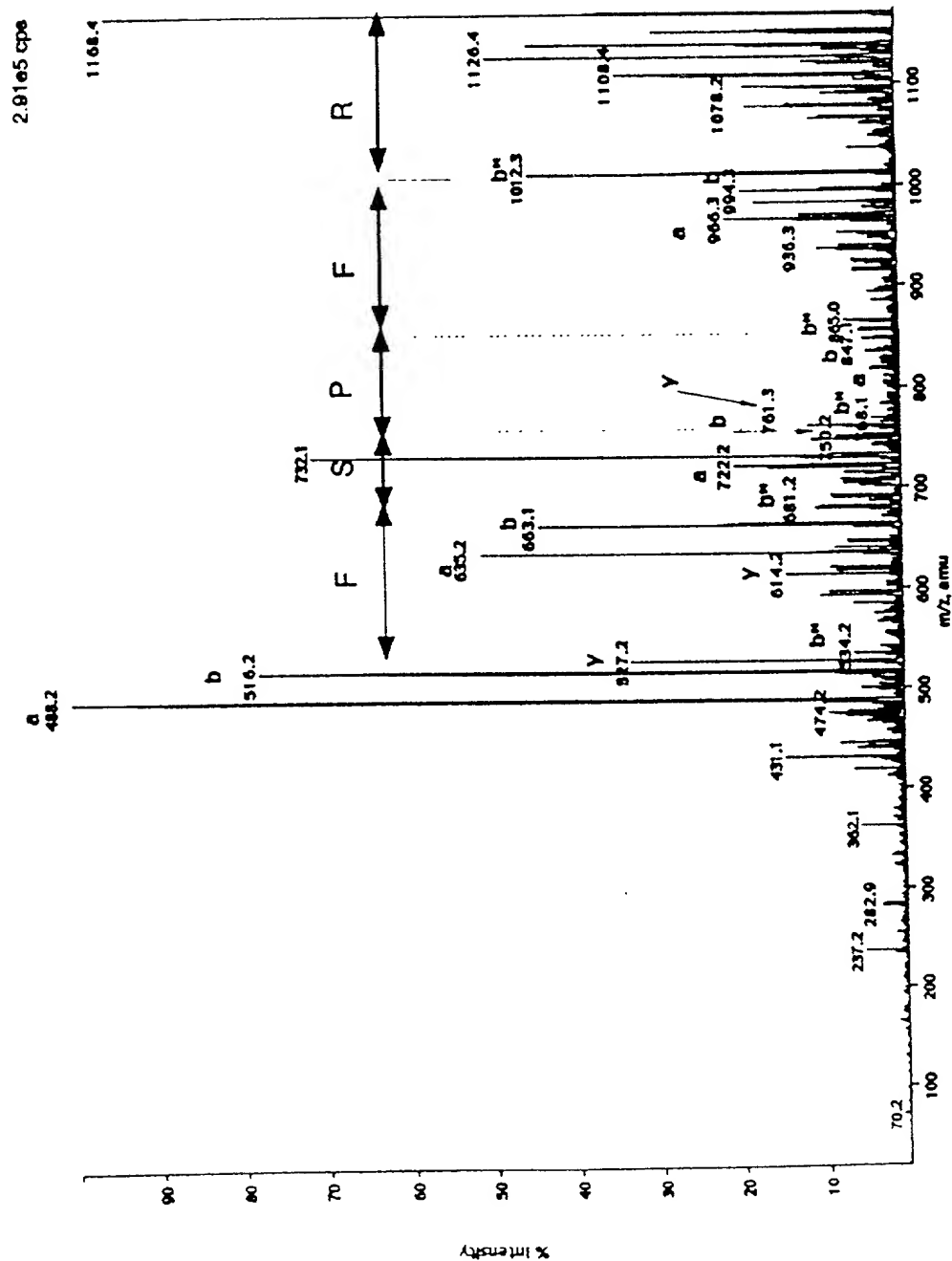


FIGURE 5

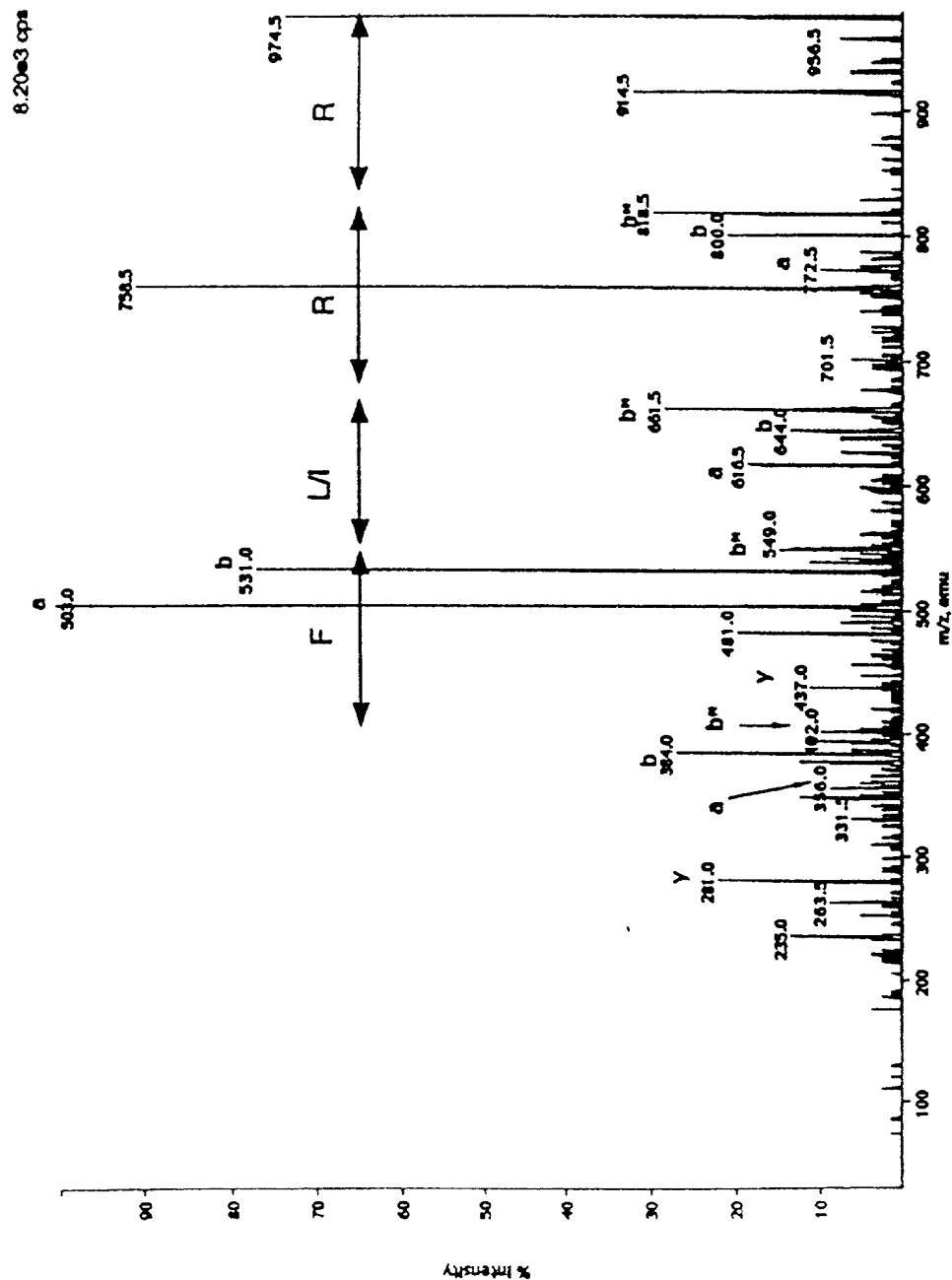


FIGURE 6

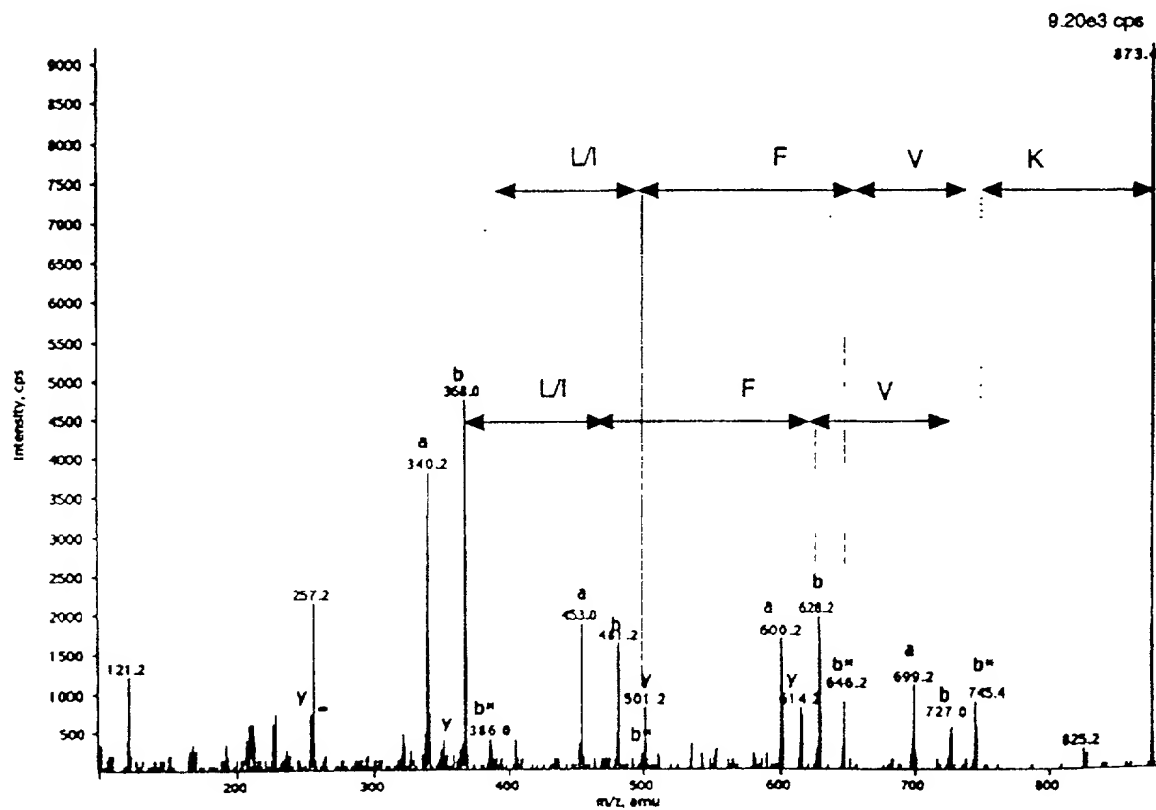
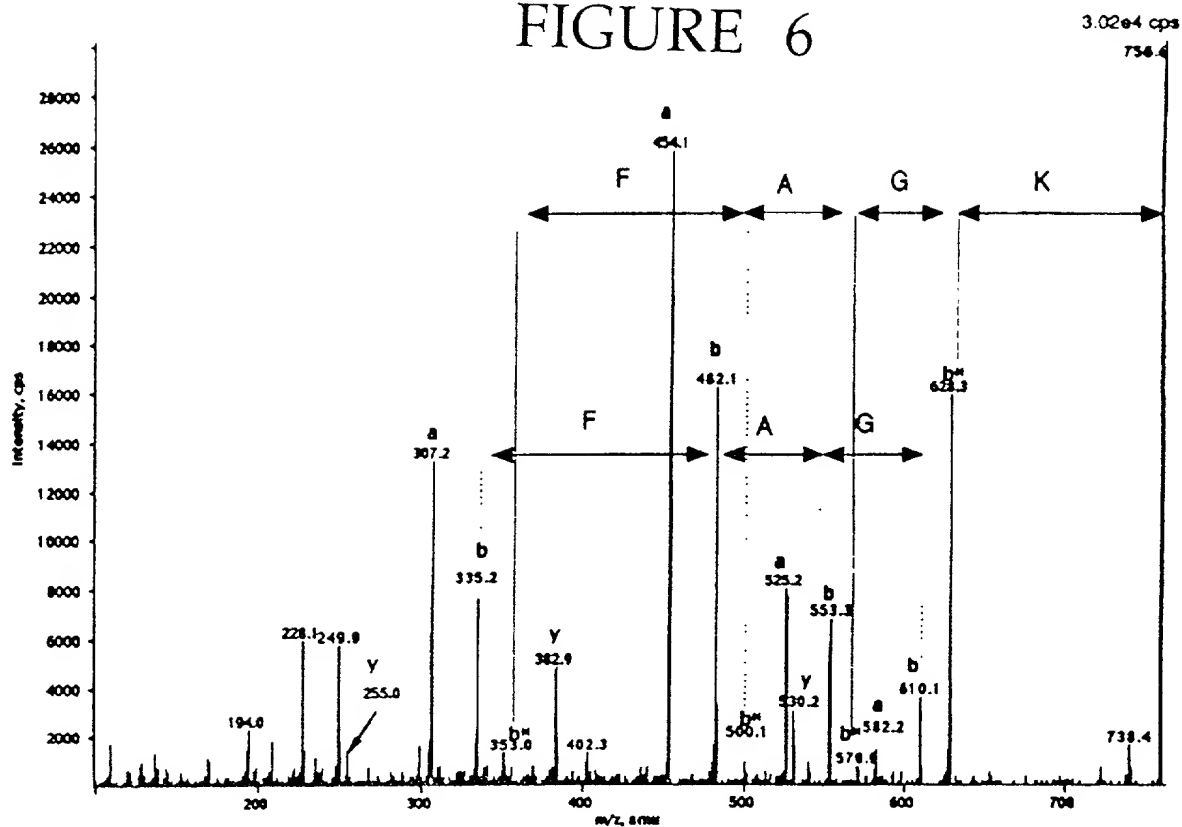


FIGURE 7

Option Explicit

%%%

// Type Declarations

%%%

// Constant Declarations

Const ciFrmHeight As Integer = 5900 '// Form height

Const ciFrmWidth As Integer = 9600 '// Form width

%%%

// Variable Declarations

Dim iCountFound As Integer '// No of series found

%%%

// Prototypes

%%%

// Function Declarations

Private Sub Form_Load()

 ' // Initialization

 Call P_LoadForm

End Sub

FIGURE 7 (cont'd)

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%  
//  
// Synopsis   : P_LoadForm  
//  
// Name       : Private Sub P_LoadForm()  
//  
// Description : Initialization of the parameters in the form  
//  
// Input      : None  
//  
// Return     : None  
//  
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%  
Private Sub P_LoadForm()  
    // Label initialization  
    lblFirstRow.Caption = ""  
    lblFirstValue.Caption = ""  
    lblSecondRow.Caption = ""  
    lblSecondValue.Caption = ""  
    lblThirdRow.Caption = ""  
    lblThirdValue.Caption = ""  
  
    // Parameters initialization  
    'glErrCode = RC_SUCCESS  
    'gsErrMsg = ""  
End Sub
```


FIGURE 7 (cont'd)

```
Private Sub cmdOK_Click()
    Call P_FirstUpdate
End Sub

'/////////////////////////////////////////////////////////////////
'//
'// Synopsis   : P_FirstUpdate
'//
'// Name       : Private Sub P_FirstUpdate()
'//
'// Description : Update in the first form
'//
'// Input      : None
'//
'// Return     : None
'//
'/////////////////////////////////////////////////////////////////
Private Sub P_FirstUpdate()
    Screen.MousePointer = vbHourglass
    'glErrCode = FindNoSeries
    Screen.MousePointer = vbDefault
    Call FindNoSeries
End Sub

Private Sub cmdCancel_Click()
    Unload Me
    Exit Sub
End Sub

Private Sub Form_Unload(Cancel As Integer)
    ' // Clean up the form
    Call P_UnloadForm
End Sub
```

FIGURE 7 (cont'd)

```

////////////////////////////////////////////////////////////////
//
// Synopsis   : P_UnloadForm
//
// Name       : Private Sub P_UnloadForm()
//
// Description : Release the resource which occupied by the parameters
//              in the form
//
// Input      : None
//
// Return     : None
//
////////////////////////////////////////////////////////////////
Private Sub P_UnloadForm()

End Sub

////////////////////////////////////////////////////////////////
//
// Synopsis   : FindNoSeries
//
// Name       : FindNoSeries() As Long
//
// Description : Function to update Uex file and stock closing price
//
// Input      : N/A
//
// Return     : FindNoSeries  RC_SUCCESS  Success
//              RC_ERROR     Error
//
////////////////////////////////////////////////////////////////
Public Function FindNoSeries() As Long
    Dim gsPath As String
    Dim gsCEFile As String

```

FIGURE 7 (cont'd)

```
Dim gsErrMsg As String
Dim sExist As String
Dim takeFile As String
Dim giCEFileNo As Integer
Dim bCloseFile As Boolean
Dim sNextLn As String
Dim asNumberFound(800) As String
Dim sFileName As String
'FindNoSeries = RC_ERROR
bCloseFile = True
'gsErrMsg = ""

gsPath = App.Path
'// Name of file is SortRecord
gsCEFile = gsPath & "\ & "SortRecord" & "\"
sExist = Dir(gsCEFile)
sFileName = txtFileName.Text & ".txt"
If sExist = sFileName Then
    bCloseFile = False
End If

If bCloseFile Then
    '// "not found. Update process not proceeded."
    gsErrMsg = "SortRecord not found. Process stops."
    MsgBox (gsErrMsg)
    'FindNoSeries = RC_ERROR
    Exit Function
End If

giCEFileNo = FreeFile
takeFile = gsCEFile & sExist
Open takeFile For Input As #giCEFileNo

Dim lLnNum As Long
```

FIGURE 7 (cont'd)

```
lLnNum = 0
Line Input #giCEFileNo, sNextLn

Do Until UCase(Trim(sNextLn)) = "END"

    '// Validation
    If EOF(giCEFileNo) Then
        '// "Unexpected end of file."
        gsErrMsg = "Unexpected end of file"
        MsgBox (gsErrMsg)
        FindNoSeries = RC_ERROR
        Exit Function
    End If
    If Not IsNumeric(sNextLn) Then
        '// "Non-numeric input "
        gsErrMsg = "Non-numeric input " & "Row " & lLnNum + 1 & "."
        MsgBox (gsErrMsg)
        FindNoSeries = RC_ERROR
        Exit Function
    End If
    If lLnNum <> 0 Then
        If Val(asNumberFound(lLnNum - 1)) < Val(sNextLn) Then
            gsErrMsg = "The input numbers are not sorted.(at row " & lLnNum + 1 & " .)"
            MsgBox (gsErrMsg)
            FindNoSeries = RC_ERROR
            Exit Function
        End If
    End If
    asNumberFound(lLnNum) = sNextLn

    DoEvents
    Line Input #giCEFileNo, sNextLn
    lLnNum = lLnNum + 1
Loop
```

FIGURE 7 (cont'd)

```
If Not EOF(giCEFileNo) Then
    '// "Unexpected end of file"
    gsErrMsg = "Unexpected end of file"
    MsgBox (gsErrMsg)
    ' FindNoSeries = RC_ERROR
    Exit Function
End If

Close #giCEFileNo

Dim lPrimaryNo As String
Dim lSecondaryNo As String
Dim lSecond As String
Dim lTotalNo As Long
Dim iOuterLoop As Integer
Dim iInnerLoop As Integer
Dim bFound As Boolean
Dim bNotFound As Boolean
Dim lMagicNo As String
Dim lTolNo As String
Dim clMagicOne As String
Dim clMagicTwo As String
Dim clTolOne As String
Dim clTolTwo As String
Dim asNumberOutput(200) As Long
Dim iCountOutput As Integer
Dim iFileNum As Integer
Dim putFile As String

'bCloseFile = True

 '// Name of output file is "Result"
'gsPath = App.Path
 '// Name of file is SortRecord
'gsCEFile = gsPath & "\" & "Result" & "\"
```

FIGURE 7 (cont'd)

```
'sExist = Dir(gsCEFile)
'If sExist = "Try1.txt" Then
'    bCloseFile = False
'End If

Tf bCloseFile Then
    '// "not found. Update process not proceeded."
    ' gsErrMsg = "Result not found. Process stops."
    ' MsgBox (gsErrMsg)
    'FindNoSeries = RC_ERROR
    ' Exit Function
'End If

// Open file for writing result
iFileNum = FreeFile
putFile = App.Path & "\\" & "Result" & "\\" & txtFileName.Text & ".txt"
Open putFile For Append As #iFileNum

// Set initial value
iCountFound = 0
clMagicOne = Val(txtDiff1.Text)
clMagicTwo = Val(txtDiff2.Text)
clTolOne = Val(txtTol1.Text)
clTolTwo = Val(txtTol2.Text)
bFound = False
bNotFound = False
iCountOutput = 0
lMagicNo = clMagicOne
lTotalNo = lLnNum
For iOuterLoop = 0 To (lTotalNo - 1)
    lPrimaryNo = asNumberFound(iOuterLoop)
    '// Set all captions
    lblFirstValue.Caption = lPrimaryNo
    lblFirstRow.Caption = iOuterLoop + 1
```

FIGURE 7 (cont'd)

```

lblSecondValue.Caption = ""
lblSecondRow.Caption = ""
lblThirdValue.Caption = ""
lblThirdRow.Caption = ""
// Reset variables in innerloop
bFound = False
bNotFound = False
lMagicNo = clMagicOne
lTolNo = clTolOne
// set innerloop begin value
iInnerLoop = iOuterLoop + 1
// do until end of list or pattern found or not found
Do Until bFound Or bNotFound Or (iInnerLoop > lTotalNo - 1)
    lSecondaryNo = asNumberFound(iInnerLoop)
    If (Val(lPrimaryNo) - Val(lSecondaryNo)) >= (Val(lMagicNo) - Val(lTolNo)) And _
        (Val(lPrimaryNo) - Val(lSecondaryNo)) <= (Val(lMagicNo) + Val(lTolNo)) Then
        If lMagicNo = clMagicTwo Then
            lblThirdValue.Caption = lSecondaryNo
            lblThirdRow.Caption = iInnerLoop + 1
            bFound = True
            'FindNoSeries = RC_SUCCESS
            Write #iFileNum, lPrimaryNo & " & " & lSecond & _
                " & " & lSecondaryNo

            'Write #iFileNum, lPrimaryNo & " & " & lSecond & " & " & lSecondaryNo
                '(lPrimaryNo - 18 + lSecond + lSecondaryNo + 28) / 3)
            iCountFound = iCountFound + 1
        Else
            lblSecondValue.Caption = lSecondaryNo
            lblSecondRow.Caption = iInnerLoop + 1
            lSecond = lSecondaryNo
            lMagicNo = clMagicTwo
            lTolNo = clTolTwo
        End If
    ElseIf (Val(lSecondaryNo) - Val(lPrimaryNo)) > Val(lMagicNo) Then

```

FIGURE 7 (cont'd)

```
        bNotFound = True
    End If
    iInnerLoop = iInnerLoop + 1
Loop
Next
// Close file
Close #iFileNum

If bFound = False Then
    'FindNoSeries = RC_NOT_FOUND
End If

If iCountFound <> 0 Then
    lblTrueFalse.Caption = "True"
    MsgBox (iCountFound & " specific series number are found and save in " & txtFileName.Text &
        ".txt!!")
Else
    lblTrueFalse.Caption = "False"
    MsgBox ("The specific series number is not found!!!!")
End If

End Function
```